

What is claimed is:

1. A digital device provided with an operating system for executing in parallel a plurality of tasks each managed as one execution unit by program execution means, comprising:

5 task attribute information storage means for storing an attribute of an function which constitutes said task;

program execution means for transmitting information on an attribute of a function under execution, and for querying about execution of an abort to a task to which said function
10 belongs;

task execution determination means for determining whether or not the abort is executed based at least on the attribute of the function under execution responsive to the query from said program execution means on the execution of
15 the abort; and

task attribute recognition means for storing the attribute of the function currently under execution in said task attribute information storage means, based on the information on the attribute of the function transmitted from
20 said program execution means, and for returning the attribute of the function stored in said task attribute information storage means in response to a query from said task execution determination means about the attribute of the function currently under execution.

25 2. The digital device according to claim 1, wherein

said information on the attribute of the function is a name of the function under execution, and

said task attribute recognition means determines the attribute of the function under execution based on the name.

5 3. The digital device according to claim 1, wherein said task managed as one execution unit is a process.

4. The digital device according to claim 1, wherein said task managed as one execution unit is a thread.

5. A task management method for use in an operating system
10 for executing in parallel a plurality of tasks each managed as one execution unit, comprising the steps of:

storing an attribute of a function currently under execution, said function forming of said task; and

determining, upon abortion of said task to which said
15 function currently under execution belongs, whether or not said function currently under execution can be aborted, based on said stored attribute of said function.

6. The task management method according to claim 5, wherein said attribute of said function is determined using
20 a name of said function currently under execution.

7. The task management method according to claim 5, wherein said task managed as one execution unit is a process.

8. The task management method according to claim 5, wherein said task managed as one execution unit is a thread.

25 9. A program for causing a computer which executes in

parallel a plurality of tasks each managed as one execution unit using a program execution function to implement:

said program execution function for transmitting information on an attribute of a function currently under execution to a task attribute recognition function, and for querying a task execution determination function about execution of an abort to a task to which said function belongs;

a task execution determination function for determining whether or not said abort is executed based at least on the attribute of the function currently under execution responsive to the query about the execution of the abort;

a task attribute recognition function for storing the attribute of said function currently under execution in storage means based on the information on the attribute of said function transmitted from said program execution function, and for returning the attribute of said function stored in said storage means in response to a query about the attribute of said function currently under execution from said task execution determination function.

10. A computer readable recording medium having recorded thereon a program for causing a computer which executes in parallel a plurality of tasks each managed as one execution unit using a program execution function to implement:

said program execution function for transmitting information on an attribute of a function currently under

execution to a task attribute recognition function, and for querying a task execution determination function about execution of an abort to a task to which said function belongs;

a task execution determination function for determining whether or not said abort is executed based at least on the attribute of the function currently under execution responsive to the query about the execution of the abort;

a task attribute recognition function for storing the attribute of said function currently under execution in storage means based on the information on the attribute of said function transmitted from said program execution function, and for returning the attribute of said function stored in said storage means in response to a query about the attribute of said function currently under execution from said task execution determination function.

11. A digital device provided with an operating system for executing in parallel a plurality of tasks each managed as one execution unit using program execution means, comprising:

task attribute information storage means for storing an attribute of said task;

said program execution means for transmitting information on the attribute of said task to task attribute recognition means, and for querying task attribute determination means about execution of an abort to said task;

task execution determination means for determining whether or not said abort is executed based at least on the attribute of said task responsive to the query about the execution of the abort; and

5 task attribute recognition means for storing the attribute of said function currently under execution in said task attribute information storage means based on the information on the attribute of said function transmitted from said program execution function, and for returning the
10 attribute of said function stored in said task attribute storage means in response to a query about the attribute of said function currently under execution from said task execution determination means.

12. A task management method in an operating system for
15 executing in parallel a plurality of tasks each managed as one execution unit, comprising the steps of:

storing an attribute of said task currently under execution; and

determining whether or not said task currently under
20 execution can be aborted based on the stored attribute of said task upon execution of an abort to said task.

13. A program for causing a computer which executes in parallel a plurality of tasks each managed as one execution unit using a program execution function to implement:

25 said program execution function for transmitting

information on an attribute of a task currently under execution,
and for querying about execution of an abort to said task;

a task execution determination function for determining
whether or not said abort is executed based at least on the
5 attribute of said task currently under execution responsive
to the query on the execution of the abort from said program
execution function; and

a task attribute recognition function for storing the
attribute of said task currently under execution in storage
10 means based on the information on the attribute of said task
transmitted from said program execution function, and for
returning the attribute of said task stored in said storage
means in response to a query about the attribute of said task
currently under execution from said task execution
15 determination function.

14. A computer readable recording medium having recorded
thereon a program for causing a computer which executes in
parallel a plurality of tasks each managed as one execution
unit using a program execution function to implement:

20 said program execution function for transmitting
information on an attribute of a task currently under execution,
and for querying about execution of an abort to said task;

a task execution determination function for determining
whether or not said abort is executed based at least on the
25 attribute of said task currently under execution responsive

to the query on the execution of the abort from said program execution function; and

a task attribute recognition function for storing the attribute of said task currently under execution in storage means based on the information on the attribute of said task transmitted from said program execution function, and for returning the attribute of said task stored in said storage means in response to a query about the attribute of said task currently under execution from said task execution

determination function.